

APPENDIX E

STAKEHOLDER AGREEMENTS

NEW MEXICO STATE UNIVERSITY

NEW MEXICO HIGHWAY AND TRANSPORTATION DEPARTMENT

WHITE SANDS MISSILE RANGE

FORT BLISS MILITARY RESERVATION

STAKEHOLDER AGREEMENT
between
NEW MEXICO STATE UNIVERSITY
and
NEW MEXICO ENVIRONMENT DEPARTMENT

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BACKGROUND

REASONS FOR DUST CONTROL

New Mexico State University recognizes that control of airborne dust can be beneficial for a number of reasons. Some of those reasons include:

Health. Fine dust can contribute to respiratory problems.

Safety. Dust can diminish visibility, contributing to traffic problems.

Quality of Life. Even when not unhealthy or unsafe, dust can be unpleasant.

Erosion. Reducing the erosion of loose soil can save on repair costs.

In addition, recent air quality monitoring has showed that dust has caused Dona Ana County air to have exceeded standards of the Clean Air Act, which could result in designation of the county as a “non-attainment” area, with many attendant consequences. An active plan to control man-made sources of dust where practical through a Natural Events Action Plan (NEAP) may help avoid those sanctions. This has some implications on the county's economic development, and NMSU is happy to assist in the effort to keep the area regarded as a clean, pleasant area in which to live and work.

PHILOSOPHICAL APPROACH TO DUST CONTROL ON CAMPUS

Except where it is in conflict with the University's mission, NMSU will consider reasonable efforts to control dust generation on the main campus. Efforts will also be undertaken to educate the campus community about this issue. It is likely that dust control may offer opportunities for research and testing, and NMSU may be able to pursue such opportunities, benefiting others as well as itself.

Large sections of the campus are under active cultivation, or developed to the extent that little dust is generated under anything but the most severe winds. Even larger sections of the University's lands are effectively undisturbed. NMSU will take appropriate measures to limit disturbance of these natural areas, such as restricting vehicle access, in order that they not become future dust sources.

In areas which are no longer undisturbed, simple, common-sense measures will be employed whenever available. This includes such steps as avoiding earthwork, trenching, etc. during high winds whenever possible and requiring contractors working on campus to observe reasonable dust-control measures.

Attention and effort toward specific dust control measures will be focused mainly on those areas where they are likely to create the greatest benefit, those lands which have been disturbed, but not developed. Generally, NMSU's preferred approach to controlling wind-generated dust from

such areas will be to return them to natural state where practical. This strategy could be applied to large areas on campus, and offers the significant advantage that it is relatively permanent. Such tactics as revegetation would improve appearance, as well.

Of course, returning to natural conditions is not feasible in all areas. Where the source is significant, NMSU will consider other methods, as appropriate and available on a case-by-case basis to the area in question.

Considering that NMSU is the primary New Mexico "Agriculture College," substantial holdings are dedicated to various Ag pursuits. Those which have been developed (large areas have been left as native rangeland with little disturbance) are generally developed and under cultivation or pasture, and typically observe Best Available Control Measures (BACM) practices, per Natural Resource Conservation Service guidelines, which also serve well as dust-control strategies.

NMSU LANDS IN DONA ANA COUNTY

MAIN CAMPUS

The portion of NMSU usually regarded as the “main campus” consists of a triangle of approximately 900 acres bordered by the two interstate highways to the east and southwest, and University Avenue on the north. Approximately half of this area is developed. The majority of the disturbed but undeveloped lands lie within this area. Unpaved parking areas probably are the major source of dust on this portion of campus.

In addition to the main campus triangle, NMSU also owns approximately 2,600 acres adjacent to the triangle, located across Interstate Highway 25 to the east. This area includes the NMSU Golf Course, two areas which are leased - one to the Farm & Ranch Heritage Museum, and the other to a gravel operation - and some relatively small NMSU facilities. However, the majority of this 2,600 acres is undisturbed native land. The principal source of dust here is probably unpaved roads.

Population close to the main NMSU campus area includes the campus community itself, plus several residential areas nearby. The campus population is roughly 25,000 during a normal day, including approximately 3,500 people who reside on campus. The City of Las Cruces borders the University on the north, while Mesilla Park, the village of Tortugas, and housing developments lie to the southwest. The area most likely to be impacted by dust generated on campus, however, is the Las Alturas region immediately east of IH-25, as this area is “downwind” of the campus during most high wind events.

OTHER LANDS IN DONA ANA COUNTY

NMSU also owns several Agriculture-related areas in the county. Two of these are located in Mesilla Park. The Fabian Garcia Horticulture Farm is roughly 42 acres, while the NMSU Horse Center is about 52 acres. Both are usually under cultivation, which serves to stabilize the soil, and are not major dust generators under normal conditions.

The other two areas in the county are away from town. The Leyendecker Plant Science Center is a 206-acre farm located on the east bank of the Rio Grande approximately 8 miles south of the main campus. This area also is under active cultivation for most of the year, and not considered to be a large source of dust. The largest NMSU land holding in Dona Ana County is the Jornada Experimental Range, with approximately 64,000 acres, located northeast of Las Cruces and to the north of Highway 70. It is used for range research, and most of the range is in its native state. Neither of these holdings has any significant population downwind.

DESCRIPTION AND PRIORITIZATION OF DUST SOURCES

EVALUATION OF SOURCE SIGNIFICANCE

Most of NMSU's lands away from the main campus are either undisturbed or stabilized by cultivation, following responsible soil conservation practices, and thus not likely to generate large amounts of "man-made" dust. In addition, none of these more remote areas are likely to impact large populations with any dust that may be generated. In contrast, the main campus has significant areas which have been altered, but not developed. There are people who live on main campus as well as adjoining areas, who could be impacted by dust generated. Moreover, the main campus receives greater daily use, which limits the ability of disturbed areas to stabilize naturally.

For these reasons, NMSU focused initial dust control efforts on the main campus. Main campus and adjacent ("East Campus") land holdings—total of about 3,500 acres—were reviewed to determine land use, and identify potential sources of dust. Land areas were assigned to one of 8 general categories, as described below. Five of the eight categories are potential sources of anthropogenic dust, and within NMSU's control, and were investigated further; the other three were not considered at this time.

SOURCE PRIORITY

The five categories of potential dust sources are each catalogued in tables included as Attachment A. Within each category, significant areas are individually identified (e.g., specific lots for unpaved parking areas), then each is evaluated for its size, proximity to population, and use to determine its significance as a potential dust generating source. A priority for addressing these individual areas is then assigned, and potential short-term, and long-term control measures are identified for each area.

For convenience, category definitions, approximate land area in each, and summary information where appropriate is provided below:

Developed. Includes buildings, turf or landscaped area, paved area. Roughly 350 acres.

Undisturbed. Land which is in a natural state, including areas which may have been disturbed at one time, but have been idle for sufficient time for native vegetation to become re-established. Roughly 2,800 acres.

Agricultural. Areas used for crops, ag research, pasture livestock holding pens, etc. About 79 acres.

Unpaved parking. Graded, but unsurfaced areas used for occasional to moderately frequent vehicle parking and occasional other purposes. Approximately 82.5 acres.

Unpaved roads. Estimated 6.5 miles.

Utility. Areas used for storage of materials, parking equipment, etc. Roughly 19.7 acres.

Other disturbed. Areas which have been disturbed for some reason but not really in use for any specific purpose. (E.g., old NMSU Landfill.) Approximately 18.6 acres.

Leased. Land owned by NMSU, but under lease to another party, and generally outside the University's effective control for dust management practices. About 141 acres.

CONTROL PLAN

CONTROL METHODS

NMSU is committed to analyzing, developing and implementing appropriate dust control measures as detailed in Attachment A, as well as minimizing disturbance of natural areas. In undertaking these efforts, NMSU will utilize the City of Las Cruces Dust Control Ordinance as a model where appropriate. That Ordinance will apply to some leased University-owned land within the City limits, and a copy is included as Attachment C. A map outlining the areas identified as potential sources of dust generation has been included as Attachment D.

The catalog of potential dust sources in Attachment A shows that the most significant sources are either unpaved roads or unpaved parking. Thus, the plan will focus initial efforts mainly on such areas, as described in “control measures,” below. As initial measures are implemented, NMSU will continue to research additional controls, and pursue education of the campus community. The plan set forth here is not to be considered the “final,” but rather the first step in an evolutionary process.

SHORT TERM

Initial control measures for unpaved parking will emphasize applying water, as both a short-term dust control tactic and part of a long-term strategy. Obviously, the water helps to hold the soil while it is damp. It also promotes the growth of native vegetation. NMSU will supplement the naturally-occurring plant growth by overseeding in selected areas.

The goal in this approach is to establish a cover *before* our windy season, rather than trying to water areas after the dust starts flying. This strategy will be most effective in parking areas which are used infrequently, such as the large unpaved lots east of the stadium. These lots with infrequent use would be “high mowed” prior to the event season, allowing for a minimum of soil movement. After the use season, the area would be watered and re-seeded as appropriate.

LONG TERM

In parking areas where use is heavier, it may not be practical to re-establish vegetation. Where this is found to be the case, NMSU will pursue other long-term control measures, including, but not limited to windbreaks, the application of binders, soil stabilizers, and possible paving of some areas.

In addressing unpaved roads, the control measure of choice will be simply to close such roads wherever possible. Once traffic is eliminated, efforts will be undertaken to revegetate the areas, similar to the approach described above for unpaved parking. For roads which cannot be closed, we will investigate alternatives, including reduced speed and vehicle weight limits, reducing road width, and appropriate surface treatments.

CONTINGENCY MEASURES

Contingency measures to be considered if the proposed controls are inadequate include, but may not be limited to:

- Increased frequency of suppressant application
- Increased application rates of suppressants
- Windbreaks
- Speed reductions
- Vehicle Size restrictions
- Access limitation (e.g., time or seasonal)
- Knockoff Grates
- Surface Improvement

EXPECTED CONDITIONS IN 2004

NMSU's dust control plan will continue to evolve over the next several years as experience is gained, and technology develops. The plan will be influenced by development of the campus and the effectiveness of initial control efforts. It may prove desirable to modify the approach in some areas to accommodate research or testing of alternate control strategies. Results of that research may well bring about further changes in this plan.

Within the next three to four years, NMSU would expect to have restored at least seasonal plant growth to roughly half of our present unpaved parking, and to have closed many of the dirt roads, with seeding and watering promoting their return to a natural state.

By 2004, we also would expect to have implemented dust control measures to the remaining unpaved parking and roads, and to have broadened our focus to begin dust control efforts in other categories, most probably the "other disturbed" and "utility" areas described earlier.

ATTACHMENT A

This section tabulates details on land categories, potential sources of dust, priorities, and appropriate short-term and long-term control measures to be considered for each. These strategies may change based on conditions, or as we become aware of other options. In addition, contingency measures as outlined in the "Control Plan" section will be considered if the recommended controls prove inadequate.

Explanation of Table Headings

Location	Identifies the particular area, road name, lot number, etc.
	Provides approximate acreage of this location, or linear feet of roadway.
Impact	Reflects evaluation of probable dust impact on people, considering proximity and number of people usually nearby.
	Reflects evaluation of how use of area is likely to influence area's dust generation, considering frequency, nature and intensity of use.
Significance	Relative importance of this area as a dust source.
Priority	Relative ranking of this area for pursuing dust control measures. NOTE: Priorities are not assigned to all areas, only those with "High" or "Medium" significance.
Short-Term Controls	Measures planned to be taken before the 2001 "dust season" (by early spring 2001).
Long-term Controls	Measures planned to be implemented after 2001, but generally within the next 5 years.

Definition of Terms used in the Tables

Surface treatment	Generally refers to measures which would be expected to provide short-term control of dust, such as watering, application of less persistent soil stabilizers.
Surface Improvement	Generally refers to measures expected to provide control for a more extended period, such as paving, soil binders, asphalt millings, etc.

TABLE 1
UNPAVED ROADS ON NMSU MAIN CAMPUS

LOCATION	SIZE (L.F.)	IMPACT	USE	SOURCE SIGNIFICANCE	PRIORITY	SHORT-TERM CONTROLS	LONG-TERM CONTROLS
Standley--Triviz to Locust	2,750	High	Low	Medium	1	Close to traffic	Revegetate
Geothermal--President's Residence to Driving Range	2,800	Medium	High	Medium	2	Speed control, surface treatment	Pave
Geothermal--Driving Range to A Mountain	7,100	Low	Low	Low		Speed Control (20mph) Grates	Access restriction, width reduction
Rodeo Arena Road		Low	High	Medium	3	Speed Control, Surface treatment	Surface treatment
Misc. East campus roads	11,000	Low	Low	Low		Some closures, Speed Control, Grates	Access restriction
Rodeo Arena to Haz Mat Facility	1,450	Low	Low	Low		Speed Control, Surface treatment	Surface treatment
Misc. Roads Main Campus	5,700	Low	Low	Low		Some closures, restrict access	Revegetate, surface treatments

TABLE 2
UNPAVED PARKING AREAS ON NMSU MAIN CAMPUS

LOCATION	SIZE (Acres)	IMPACT	USE	SOURCE SIGNIFICANCE	PRIORITY	SHORT TERM CONTROLS	LONG TERM CONTROLS
Lot 30 (Pan Am) West Half	12	High	High	High	4	Surface treatments	Surface Improvements
Lot 30 (Pan Am) East Half	11.2	High	Med	High	9	Surface treatments	Vegetation
Lot 35 East of Field House	1.6	High	High	High	5	Surface treatments	Surface Improvements
Lot 34 East of Stadium	26.4	High	Low	Med	10	Surface treatments	Vegetation
Lot 88/87 Southeast of Stadium	1.6/1.8	High	Low	Med	11	Surface treatments	Surface treatment
Lot 86 Southwest of Stadium	3.5	High	Low	Med	12	Surface treatments	Surface treatment
Lot 96 East of OFS	13.9	Med	Low	Low		Surface treatment- mill cuttings	Surface treatment- mill cuttings
Lot 99 Wells at Williams	3.4	High	High	High	6	Surface treatments	Surface treatment
Lot 98 Wells at Sam Steele	.6	High	High	Low See Note 1		Surface treatments	Surface treatment
Lot 58 North of DABCC	1.7	High	High	High	7	Surface treatments	Surface treatment
Lot 103 Swine Center	2.0	Low	Low	Low		Close (See Note 2)	Return to natural
Lot 97 South of ARC	2.8	Med	Med	Med	13	Surface treatments	Surface treatment

Note 1: Low significance due to size and wind block.

Note 2: This is a temporary lot, created to provide parking during a construction project, and will be replaced by paved lot within the year.

TABLE 3
OTHER DISTURBED AREAS

LOCATION	SIZE (Acres)	IMPACT	USE	SOURCE SIGNIFICANCE	PRIORITY	SHORT TERM CONTROLS	LONG TERM CONTROLS
I-25 Underpass Construction Site	10.0	High	Low	Med		Surface treatment Revegetate	Revegetate
Landfill	8.6	Med	Low	Med		Wind Break	See Note 1

Note 1: Closure plan for the landfill limits what can be done. E.g., revegetation would be difficult, as the area cannot be irrigated.

TABLE 4
UTILITY/STORAGE AREAS

LOCATION	SIZE (Acres)	IMPACT	USE	SOURCE SIGNIFICANCE	PRIORITY	SHORT TERM CONTROLS	LONG TERM CONTROLS
OFS Yard	13.7	Med	High	High	8	Speed Control 15 MPH	Surface treatment Mill cuttings
East Campus Storage Yard	4.5	Low	Low	Low		See Note 1	Natural cover
OFS Compost Yard	1.5	Med	Med	Low See Note 2		Water Timed Use	Wind Break Water Timed Use

* Equipment Yards

* Construction Sites

* Miscellaneous Disturbed Sites

Note 1: Because of very infrequent use, significant natural revegetation has occurred. Also, fencing and the items stored serve as effective windbreaks.

Note 2: Low significance because of high moisture content maintained in composting process, fencing, and windrows.

TABLE 5
AGRICULTURAL USE AREAS

LOCATION	SIZE (Acres)	IMPACT	USE	SOURCE SIGNIFICANCE	PRIORITY	SHORT TERM CONTROLS	LONG TERM CONTROLS
Animal Holding Pens Main Campus	21.4	High	High	Med See Note 1		Surface treatment Water Timed Use	Surface treatment Water Timed Use
Cultivated Ag Lands Main Campus	53.9	High	Low	Low		Best available NCRS practice	Best available NCRS practice
Cultivated Ag Lands Garcia Horticulture Farm	42	High	Low	Low		Best available NCRS practice	Best available NCRS practice
Cultivated Ag Lands Leyendecker	206	Low	Low	Low		Best available NCRS practice	Best available NCRS practice
Cultivated Ag Lands Equestrian Center	50	Med	Low	Low		Best available NCRS practice	Best available NCRS practice
CDRRC Rangeland	64,000	Low	Low	Low		Native vegetation	Native vegetation
Rodeo Arena & Stables	3.8	Low	Med	Med		Surface treatment	Surface treatment
Horse Center	52	High	Med	Low		Best practice	Best NCRS

Note 1: Med significance due to wind breaks, controlled use, low disturbance.

TABLE 5
AGRICULTURAL USE AREAS

LOCATION	SIZE (Acres)	IMPACT	USE	SOURCE SIGNIFICANCE	PRIORITY	SHORT TERM CONTROLS	LONG TERM CONTROLS
Animal Holding Pens Main Campus	21.4	High	High	Med See Note 1		Surface treatment Water Timed Use	Surface treatment Water Timed Use
Cultivated Ag Lands Main Campus	53.9	High	Low	Low		Best available NCRS practice	Best available NCRS practice
Cultivated Ag Lands Garcia Horticulture Farm	42	High	Low	Low		Best available NCRS practice	Best available NCRS practice
Cultivated Ag Lands Leyendecker	206	Low	Low	Low		Best available NCRS practice	Best available NCRS practice
Cultivated Ag Lands Equestrian Center	50	Med	Low	Low		Best available NCRS practice	Best available NCRS practice
CDRRC Rangeland	64,000	Low	Low	Low		Native vegetation	Native vegetation
Rodeo Arena & Stables	3.8	Low	Med	Med		Surface treatment	Surface treatment
Horse Center	52	High	Med	Low		Best practice	Best NCRS

Note 1: Med significance due to wind breaks, controlled use, low disturbance.

ATTACHMENT B

WHEREAS wind-generated atmospheric dust has various negative effects, including, but not limited to health hazards, safety concerns, and generally diminished quality of life, and

WHEREAS Dona Ana County has been found to have exceeded Air Quality Standards as a sole result of wind-generated airborne dust, which could result in designation of the County as “Non-Attainment,” and

WHEREAS non-attainment designation would impose a stigma on the region, and have negative consequences on business development and regulatory burden for the entire County, including NMSU, and

WHEREAS the US EPA and NM Environment Department have provided the alternative of developing a Natural Events Action Plan as a way to avoid non-attainment designation, and

WHEREAS NMSU is a stakeholder in possible non-attainment situation and further controls significant lands, which potentially generate dust,

NOW, THEREFORE BE IT RESOLVED that NMSU commits to participate in the regional NEAP through development of a Stakeholder Agreement with the New Mexico Environment Department, and

BE IT FURTHER RESOLVED that the Vice President for Facilities be appointed and authorized to act as the university's agent in negotiating and implementing such Stakeholder Agreement.

NEW MEXICO STATE UNIVERSITY
BOARD OF REGENTS
RESOLUTION

WHEREAS, wind-generated atmospheric dust has various negative effects, including, but not limited to, health hazards, safety concerns, and generally diminished quality of life; and

WHEREAS, Dona Ana County has been found to have exceeded Air Quality Standards as a sole result of wind-generated airborne dust, which could result in designation of the County as "Non-Attainment;" and

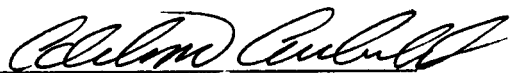
WHEREAS, non-attainment designation would impose a stigma on the region, and have negative consequences on business development and regulatory burden for the entire County, including NMSU; and

WHEREAS, the United States Environmental Protection Agency and New Mexico Environment Department have provided the alternative of developing a Natural Events Action Plan as a way to avoid non-attainment designation; and

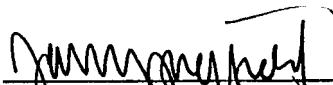
WHEREAS, NMSU is a stakeholder in possible non-attainment situation and further controls significant lands, which potentially generate dust;

NOW, THEREFORE, BE IT RESOLVED that NMSU commits to participate in the regional NEAP development of a Stakeholder Agreement with the New Mexico Environment Department; and

BE IT FURTHER RESOLVED, that the Vice President of Facilities be appointed and authorized to act as the University's agent in negotiating and implementing such Stakeholder Agreement.



Adelmo Archuleta, President
Board of Regents



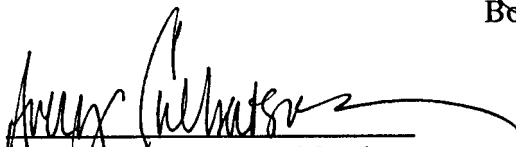
Larry Sheffield, Vice President
Board of Regents



John J. VanSweden, Secy.-Treasurer
Board of Regents



James C. Manatt, Jr., Member
Board of Regents



Avery L. Culbertson, Member
Board of Regents

STAKEHOLDER AGREEMENT

Between

New Mexico State Highway and Transportation Department

And

New Mexico Environment Department

Background

The New Mexico State Highway and Transportation Department (NMSHTD) recognizes that recent air quality monitoring has shown that man-made, windblown dust has caused Dona Ana County's ambient air quality to exceed national air quality standards, which could result in designation of the County as a Federal "non-attainment" area for particulate material. The consequence of this has implications that may reduce the County's economic development and impact development of infrastructure within the County. An active dust control and abatement is required by the Natural Events Action Plan (NEAP) in order to avoid these sanctions. The NMSHTD is providing this stakeholder agreement and dust control and abatement plan in order to satisfy conditions of the NEAP, and as an effort to keep Dona Ana County regarded as a clean and pleasant area in which to live and work.

Except where it is in conflict with the NMSHTD mission, NMSHTD will take reasonable efforts to control and abate dust generated by construction or maintenance activities in Dona Ana County. The NMSHTD will also undertake efforts to educate employees, contractors and subcontractors about the issue of dust emissions during state highway construction and maintenance activities within the County.

This Agreement is not intended by any of the provisions of any part of the Agreement to create in the public, or any member thereof, a third party beneficiary or to authorize anyone not a party to the Agreement to maintain a suit for any claim whatsoever pursuant to the provisions of this Agreement.

Potential Emissions From Highway Construction

Potential emissions are PM10 (dust) from highway construction and maintenance sites throughout the county. Other sources are from roadway embankments and shoulders, and material stockpiles or waste piles located at construction sites. Aggregate mining operations used by NMSHTD contractors are also potential sources of dust. Disturbances to soils may be created by heavy equipment including but not limited to front-end loaders, haul trucks, backhoes, asphalt laying machinery, scrapers, concrete/asphalt recycling equipment, rollers, screening operations, conveyor belts, and transit mix concrete trucks.

Location and Approximate Area of the Sources

Sources can be anticipated to be located throughout the county on those state-controlled roads, overpasses/underpasses, bridges and interchanges that will undergo construction, modification or repair. It is estimated that 70 miles of state or federally funded roadwork or related construction will occur in Dona Ana County between 2001-2004 (Statewide Transportation Improvement Program FY1999-FY2004). Proximity of these potential

sources of dust to populated places such as schools, apartments and housing developments will vary greatly with location. Areas of sources (disturbances) during the 2001-2004 construction period may vary from 1 acre to 29 acres for any particular project. Land use areas will be restricted to existing roadways and rights of way. The frequency of disturbance will vary according to the project, and several disturbances will occur with larger projects. Disturbances to a specific site may last from two weeks to several months.

Areas where construction, modification or repair activities may occur will include heavily populated residential/commercial areas, moderately or sparsely residential/commercial areas, sparsely populated residential/agricultural areas, or unpopulated agricultural/undeveloped areas. Areas that are considered high priority for dust abatement and control will be all populated areas (sparsely, moderately, or heavily) that are within a one-mile radius of any construction activity. Lower priority areas will be those that are unpopulated within a one-mile radius of construction activities. High and low priority sites are based upon the significance of projected impacts to nearby human populations. Impacts due to large construction projects that are within a one-mile radius of heavily populated areas will receive the highest priority for dust abatement and control.

NMSHTD DUST CONTROL AND ABATEMENT PLAN

The NMSHTD dust abatement and control plan for Dona Ana County will assure that environmental and human health concerns are fully considered in the necessary environmental documentation for projects performed within the County. The NMSHTD will take prudent measures to avoid and minimize environmental impacts, and take reasonable steps to mitigate unavoidable environmental impacts. Additionally, the NMSHTD will incorporate these steps into enforceable construction contracts, as stipulated in the Memorandum of Understanding between the NMSHTD and the New Mexico Environment Department (November 2, 1994).

Legal and Regulatory Compliance

The NMSHTD will comply with applicable provisions of federal, state and local environmental laws and regulations, and ensure compliance with particular provisions of these laws and regulations, including:

- Ensure, when appropriate, that all cut and fill slopes are sufficiently gentle that native plant cover can be restored to a level which will prevent erosion of soils by wind and water.
- Require, as contract specifications, that contractors and their subcontractors have necessary air quality permits for specific highway project locations.
- Provide training to appropriate NMSHTD personnel on current environmental regulations and standards administered within Dona Ana County. NMSHTD staff will have access to in-house, state, county, and city training involving requirements listed in this agreement.

- Require, as contract specifications for projects within Dona Ana County, a comprehensive Revegetation/Erosion Control Plan (see example in Appendix A).

Standard Specifications

The NMSHTD Standard Specifications for Highway and Bridge Construction, 2000 edition, under Section 107 and Section 603, states the following:

107.17 Air Quality and Dust Abatement. Dust abatement in the project area and all contractor occupied areas is subject to the requirements of subsection 603.33, Temporary Soil Stabilant Application. In addition, all burning operations, dust producing activities, and other operations that produce particulate matter shall comply with State and Federal air quality regulations, as administered by the Air Pollution Control Bureau of the New Mexico Environment Department, as well as any local air quality regulations that may apply.

603.33 Temporary Soil Stabilant Application. Temporary soil stabilant shall be applied to all exposed soil areas that are not being actively worked on. The Contractor shall initiate stabilization measures within 14 days of temporary or permanent cessation, unless construction is resumed within 21 days. Treated areas showing evidence of continued erosion or substandard temporary soil stabilant application within four weeks after initial application shall be retreated at no additional cost to the Department as directed by the Project Manager. For those cases where the Contractor redisturbs those location(s) where temporary soil stabilant was applied, the Contractor is responsible for reapplying the temporary soil stabilant at no cost the Department.

RESOLUTION

WHEREAS wind-generated atmospheric dust has various negative effects, including, but not limited to, health hazards, safety concerns, and generally diminished quality to life, and

WHEREAS Dona Ana County has been found to have exceeded National Ambient Air Quality Standards as a sole result of wind-generated airborne dust, which could result in designation of the County as Non-Attainment for particulate material, and

WHEREAS a Non-Attainment designation would impose a stigma on the region, and have negative consequences on business development and regulatory burden for the entire County, and negatively impact planned road work performed by the NMSHTD, and


WHEREAS the US Environmental Protection Agency and New Mexico Environment Department have provided the alternative of developing a Natural Events Action Plan (NEAP) as a way to avoid non-attainment designation, and

WHEREAS the NMSHTD is a stakeholder in a possible non-attainment situation and further controls or maintains significant lands and performs activities within Dona Ana County which can potentially generate dust,

NOW, THEREFORE BE IT RESOLVED that the NMSHTD commits to participate in the regional NEAP through development of this Stakeholder Agreement with the New Mexico Environment Department, and

BE IT FURTHER RESOLVED that the Secretary of the NMSHTD will act as the Department's agent in negotiating and implementing such Stakeholder Agreement.


New Mexico State Highway and Transportation Department



Secretary

12-21-00
Date

Approved as to form by the NMSHTD Office of General Counsel



Deputy General Counsel

12-11-00
Date

APPENDIX A
REVEGETATION/EROSION CONTROL PLAN
FOR HIGHWAY PROJECTS IN DONA ANA COUNTY

(Note: This plan is intended as an example only. It represents a typical plan presently used by the NMSHTD for highway construction projects in Dona Ana County. The plan will be modified on a project-by-project basis to allow for the use of different soil stabilants, dust suppressants, mulches, soil retention blankets, and seed mixtures)

A. ERODIBLE SURFACE AREA

ALL REQUIREMENTS OUTLINED IN THE FEDERAL ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) AND THE NEW MEXICO CLEAN WATER ACT SHALL BE STRICTLY ADHERED TO DURING THE COURSE OF CONSTRUCTING THIS PROJECT. EXPOSED AREAS OF DISTURBANCE SHALL BE KEPT TO A MINIMUM TO PERFORM PROJECT CONSTRUCTION AND SHALL BE PROTECTED BY THE APPLICATION OF TEMPORARY SOIL STABILANT AS STATED BELOW AND ANY OTHER SEDIMENT CONTROL DEVICES REQUIRED UNTIL PERMANENT MEASURES ARE APPLIED.

B. TEMPORARY SOIL STABILANT

TEMPORARY SOIL STABILANT SHALL BE APPLIED TO ALL EXPOSED SOIL AREAS WHICH ARE NOT BEING ACTIVELY WORKED. A HYDROSEEDER SHALL BE KEPT READILY AVAILABLE TO THE PROJECT SITE TO PERFORM THIS WORK. THE SOIL STABILIZING SUBSTANCE SHALL BE A POLYMERIC EMULSION CONSISTING OF AT LEAST 46% SOLIDS BY WEIGHT, AND AT LEAST 90% BY WEIGHT OF THESE SOLIDS SHALL BE ACRYLIC. INGREDIENTS SHALL BE AS FOLLOWS: SOIL PENETRANT (SODIUM SILICATES @ 3.5% MIN. OF TOTAL WEIGHT), COALESCING AGENT (POLY ETHOXYLATED ETHANOL @ 1% MIN. OF TOTAL WEIGHT), ACRYLIC COPOLYMERS (METHACRYLATES AND ACRYLATES @ 40% OF TOTAL WEIGHT). THE SUBSTANCE SHALL CONTAIN AN ANTIFOAMING AGENT AND A COLOR ADDITIVE TO ASSIST THE APPLICATOR IN UNIFORM APPLICATION OF THE PRODUCT AND WILL DISAPPEAR FROM THE SURFACE WITHIN 36 HOURS. THIS SUBSTANCE SHALL BE SIMILAR TO SOIL SEAL BY SOIL STABILIZATION PRODUCTS OR APPROVED EQUAL. ALL MANUFACTURER'S INSTRUCTIONS REGARDING THE PRODUCT INCLUDING APPLICATION RATES SHALL BE FOLLOWED. EXPOSED SOIL AREAS SHALL BE TREATED WITH TEMPORARY SOIL STABILANT AS OFTEN AS NEEDED TO CONTROL EROSION.

C. PERMANENT MEASURES

PRIOR TO COMMENCING THE SEEDING OPERATION, THE PROJECT MANAGER, LANDSCAPE ARCHITECT AND SEEDING CONTRACTOR'S REPRESENTATIVE SHALL REVIEW AREAS TO BE TREATED TO DETERMINE THE APPROPRIATE CLASS OF SEEDING AND TO INSURE THAT SLOPES HAVE

BEEN CONSTRUCTED PROPERLY. SEEDING EQUIPMENT SHALL ALSO BE INSPECTED DURING THIS PERIOD TO INSURE PROPER OPERATION. ANY WORK DONE PRIOR TO THIS INSPECTION SHALL BE REJECTED.

ALL AREAS TO BE SEEDED SHALL BE AS DIRECTED BY THE PROJECT MANAGER AND/OR THE LANDSCAPE ARCHITECT. AREAS 4:1 OR FLATTER SHALL BE TREATED WITH CLASS "A" SEEDING; SLOPES STEEPER THAN 4:1 SHALL BE TREATED WITH CLASS "D" SEEDING AND SHALL INCLUDE HAND RAKING OR CHAIN HARROWING TO COVER SEED TO A DEPTH OF 1/4" TO 1/2". HAY MULCH FOR CLASS "A" SHALL BE BARLEY STRAW AT THE RATE OF 1.5 TONS PER ACRE. MULCH SHALL BE APPLIED AS SOON AS POSSIBLE AFTER THE SEED AND FERTILIZER ARE APPLIED. ALL SEEDED AREAS SHALL BE MULCHED THE SAME DAY THEY ARE SEEDED. ANY SEEDED AREAS NOT MULCHED THE SAME DAY SHALL BE REJECTED AND RESEEDED AND NO EXTRA PAYMENT SHALL BE MADE THEREFOR.

MULCH FOR CLASS "A" SEEDING SHALL BE MECHANICALLY ANCHORED AND THEN TACKED USING THE SAME MATERIAL AS THE TEMPORARY SOIL STABILANT EXCEPT THAT IT IS APPLIED AS AN OVERSPRAY AFTER FERTILIZER, SEED AND MULCH ARE IN PLACE. TACK SHALL BE APPLIED AT A SUFFICIENT RATE SO AS TO PREVENT MULCH FROM MOVING DUE TO WINDS OR TURBULENCE CREATED BY TRAFFIC ON THE ROADWAY. AREAS WHERE MULCH FAILS TO ADHERE SHALL BE REMULCHED AND TACKED AND NO EXTRA PAYMENT SHALL BE MADE THEREFOR. SOIL RETENTION BLANKET USED FOR CLASS "D" SEEDING SHALL BE PPS SUPER DUTY, AMERICAN EXCELSIOR HIGH VELOCITY, NORTH AMERICAN GREEN S-150 OR APPROVED EQUAL. ANCHORING SHALL BE BY THE USE OF 8"x 1"x 8" "U" SHAPED STEEL STAPLES OF .091 MINIMUM DIAMETER AND SPACED AS RECOMMENDED BY THE MANUFACTURER. BLANKETS SHALL BE LAID FROM TOP TO BOTTOM ON THE SLOPE WITH SEAMS RUNNING VERTICALLY AND LAPPED AS PER MANUFACTURER'S RECOMMENDATION. BLANKET NETTING SHALL BE BIODEGRADABLE.

CONTRACTORS' CAMPSITES, STOCKPILE AREAS AND ANY OTHER NONDESIGNATED HAUL ROAD OR DISTURBED AREA SHALL BE TREATED WITH CLASS "A" SEEDING AND NO MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

PRIOR TO PERFORMING SEEDING OPERATIONS ALL WEED SPECIES WHICH MAY HAVE GROWN IN AREAS TO BE SEEDED AND WILL INTERFERE WITH THE SEED AND MULCH MAKING CONTACT WITH THE SOIL SHALL BE REMOVED.

STEEP SLOPE SEEDING (ITEM # 632100) SHALL BE APPLIED TO EXPOSED SOIL SLOPES OVER 1:3 AS FOLLOWS. SEED AND FERTILIZER SHALL BE APPLIED

ON THE SLOPE BY A HYDROSEEDER OR MAY BE BROADCAST AT TWICE THE SEEDING RATE. THE SEED SHALL THEN BE HAND RAKED INTO THE SOIL TO A DEPTH OF 6mm-13mm AND THE ROCK MULCH SHALL BE APPLIED IMMEDIATELY AFTERWARD. ANY SEEDED AREA NOT COVERED BY MULCH WITHIN THE SAME DAY SHALL BE REJECTED AND NO PAYMENT MADE THEREFOR. ROCK MULCH SHALL BE 13mm - 26mm FRACTURED FACE SIMILAR TO SANTA FE BROWN IN COLOR. A SAMPLE SHALL BE PROVIDED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ORDERING AND APPLYING MULCH. THE MULCH SHALL BE PLACED IN A LAYER APPROXIMATELY ONE STONE DEEP OVER SEEDED AREAS. SEEDING AND PLACEMENT OF MULCH SHALL BE DONE IN STRIPS FROM THE TOP OF SLOPE TO THE BOTTOM SO THAT SEEDED AREAS ARE NOT DAMAGED BY EQUIPMENT DRIVEN OVER THE AREA.

D. SEEDING

SEED MIX (THE PROJECT MANAGER SHALL CONTACT THE NEW MEXICO DEPARTMENT OF AGRICULTURE SEED TESTING LABORATORY AT 646-2886 TWO WEEKS PRIOR TO SEEDING SO THAT AN OFFICIAL SEED SAMPLE CAN BE TAKEN DURING THE SEEDING OPERATION)

<u>Species</u>	<u>Origin</u>	<u>kg/ha</u>
Bouteloua curtipendula (SIDEOTS GRAMA)	VAUGHN OR NINER	4.0
Digitaria trichacne (ARIZONA COTTONTOP)	NEW MEXICO REGION	0.5
Eragrostis trichodes (SAND LOVEGRASS)	NEW MEXICO REGION	0.5
Festuca arizonica (ARIZONA FESCUE)	REDONDO	1.0
Sporobolus airoides (ALKALI SACATON)	NEW MEXICO REGION	0.5
Sporobolus cryptandrus (SAND DROPSEED)	NEW MEXICO REGION	0.5
Gaillardia aristata (FIREWHEEL)	ANY	1.0
Sphaeralcea ambigua (DESERT GLOBEMALLOW)	ANY	1.0
Atriplex canescens (FOURWING SALTBUCH)	NEW MEXICO REGION	1.0
Chrysothamnus nauseosus (RUBBER RABBITBR.)	NEW MEXICO REGION	1.0
Eurotia lanata (WINTERFAT)	HATCH	2.0

SEEDING DATES

PERIOD A. MAY 1 THROUGH MAY 31

PERIOD B. JUNE 1 THROUGH AUGUST 31

PERIOD C. NO TIME RESTRICTIONS

PERIOD D. SEPTEMBER 1 THROUGH APRIL 30

WATER FOR "PERIOD A" SHALL BE APPLIED ACCORDING TO SECTION 632.39 OF THE STANDARD SPECIFICATIONS AT THE FOLLOWING RATES AND SHALL BE CONTINUED UNTIL JUNE 14: FIRST TWO WEEKS - FOUR APPLICATIONS OF ONE INCH EACH, TIMED THREE DAYS APART. SUBSEQUENT WEEKS - ONE INCH PER WEEK WATERING DURING THIS PERIOD SHALL BE CONSIDERED INCIDENTAL TO

THE SEEDING ITEM AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFOR.

DURING "PERIOD D", DISTURBED AREAS SHALL BE DISCED AND MULCH APPLIED AS IN CLASS "A" SEEDING AND NO SEED OR FERTILIZE SHALL BE APPLIED. THIS WORK SHALL BE PAID AT 65% OF THE CLASS "A" SEEDING UNIT BID PRICE. THE FOLLOWING SEEDING SEASON CLASS "E" SEEDING (WEED REMOVAL, IF NEEDED, OVER SEEDING AND FERTILIZER APPLICATION) SHALL BE PERFORMED AND THE REMAINING 35% OF THE CLASS "A" UNIT BID PRICE SHALL BE PAID. IF THE PROJECT IS CLOSED OUT, IT SHALL BE THE RESPONSIBILITY OF THE PROJECT MANAGER TO ADVISE THE CONSTRUCTION BUREAU OF THE NEED TO INITIATE A PROJECT TO PERFORM PERMANENT SEEDING THE NEXT SEEDING SEASON.

ANY PROPOSED CHANGES OR MODIFICATIONS TO THIS PLAN SHALL BE DISCUSSED WITH THE NMSHTD LANDSCAPE ARCHITECT PRIOR TO MAKING SUCH CHANGES OR MODIFICATIONS.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY WHITE SANDS MISSILE RANGE
100 Headquarters Avenue
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5048

MEMORANDUM OF AGREEMENT
BETWEEN
COMMANDER, WHITE SANDS MISSILE RANGE
AND
CABINET SECRETARY, NEW MEXICO ENVIRONMENT DEPARTMENT

SUBJECT: Natural Events Action Plan (NEAP)

1. PURPOSE: The purpose of this memorandum of agreement (MOA) is to define the objectives of White Sands Missile Range (WSMR) as a stakeholder in support of the Natural Events Action Plan (NEAP) being developed by the New Mexico Environment Department (NMED).

2. REFERENCES:

- a. Clean Air Act (1970)
- b. Clean Air Act Amendments (1990)
- c. New Mexico Air Quality Control Act

3. WHITE SANDS MISSILE RANGE (WSMR) DESCRIPTION: WSMR covers approximately 8,288 km² (3,200 mi²) in south-central New Mexico. It is the largest, all-overland test range in the United States.

The primary mission of WSMR is the operation of a National Range in accordance with direction from the U.S. Army Developmental Test Command (DTC). This mission includes the conduct of instrumentation research and development, and the development of U.S. Army, U.S. Navy, U.S. Air Force, NASA, and Defense Threat Reduction Agency systems.

The U.S. Army is the executive management agent for the facility, but both the U.S. Air Force and the U.S. Navy are afforded special status at the installation through the creation of service deputies. In 1999, the work force at WSMR totaled 6,026 and consisted of 2,647 civil service employees, 370 military personnel, and 3,009 contractor employees in support of these management responsibilities. WSMR operations include administrative and logistical support and technical support for more than 25 tenant organizations. More information about WSMR can be found at <http://www/wsmr.army.mil/paopage/pao.htm>.

4. BACKGROUND: White Sands Missile Range recognizes that control of airborne dust can be beneficial for a number of reasons. Some of those reasons include:

- a. Health- Fine dust can contribute to respiratory problems.
- b. Safety- Dust can diminish visibility, creating hazardous conditions to personnel.

Quality of Life- Even when not unhealthy or unsafe, dust can be unpleasant.

- d. Erosion- Reducing the erosion of loose soil can reduce maintenance needs.
- e. Environmental Stewardship- Control of dust contributes to efforts as being good stewards of the land entrusted to the Army.
- f. Mission Impacts- Part of weapons system research involves the use of optical instruments and lasers. Dust can adversely affect the use of this equipment in testing.

g. Recent air quality monitoring, has shown that dust has caused Dona Ana County air to have exceeded standards of the Clean Air Act, which could result in designation of this county as a "non-attainment" area, with many attendant consequences. An active plan to control dust where practical through a Natural Events Action Plan (NEAP) may help avoid those sanctions.

5. OBJECTIVES. Approach to Dust Control on WSMR:

a. Except where it is will significantly hinder the mission of WSMR and in times of National Emergency, WSMR will consider reasonable efforts to control dust generation. Efforts will also be undertaken to educate the installation community about this issue.

b. To provide for comprehensive dust control WSMR is currently developing a Particulate Matter Control Plan. An outline of the draft plan follows:

Construction Sites, Landfills, Impact Areas, Dirt Roads

Description
Estimate of Emissions
Recommended Control Measures
Cost Estimate

Other Sources

Zumwalt Test Track
PHETS
Obscurant Testing
Hazardous Test Area
Warhead Impact Test (WIT) and G-Areas

c. Within mission constraints WSMR will implement this plan in an effort to control man caused dust generation.

6. EFFECTIVE DATE: This agreement is effective upon signature and will continue in effect for an indefinite period. It will be reviewed during the second quarter of each fiscal year to evaluate its effectiveness and to determine any need for modifications; however, amendments or revisions may be

initiated in writing at any time. One party may terminate, by mutual consent or by written notification, this agreement 180 days in advance of the requested termination date.

FOR WHITE SANDS MISSILE RANGE:

FOR THE NEW MEXICO
ENVIRONMENT DEPARTMENT



STEVEN W. FLOHR
Brigadier General, USA
Commanding

DATE: 9 Jan 2001



PETER MAGGORIE
Cabinet Secretary
New Mexico Environment Department

DATE: 12/22/00



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
HEADQUARTERS, U. S. ARMY GARRISON COMMAND
1733 PLEASANTON ROAD
FORT BLISS, TEXAS 79916-6816

Directorate of Environment

December 12, 2000

RECEIVED

DEC 27 2000

NM ENVIRONMENT DEPARTMENT
OFFICE OF THE SECRETARY

Mr. Pete Maggiore
Secretary of the Environment
New Mexico Department of Environment
1190 St. Francis Dr.
P.O. Box 26119
Santa Fe, New Mexico 87502-6110

Subject: Doña Ana County Natural Events Action Plan

Dear Mr. Maggiore:

In regard to the proposed Doña Ana County Natural Events Action Plan, it should interest you to know that Fort Bliss has already implemented many of the dust reduction measures proposed by NMED. In discussing this issue, it is useful to consider the area operated by Fort Bliss and the relationship between Fort Bliss and the rest of the county.

The portion of Doña Ana County that lies within the Fort Bliss boundary, known as Doña Ana Range, is in the extreme eastern portion of the county, separated from the rest of the county by the Organ Mountains and the Anthony Gap. There is one North-South, paved road through the range, connecting El Paso with White Sands Missile Range. Together, Fort Bliss and WSMR control a significant proportion of the land in eastern Doña Ana County.

Fort Bliss operates several training areas, connected by unpaved roads, on Doña Ana Range. In addition, Doña Ana base camp is located in this area. The base camp is home to a New Mexico National Guard facility. This facility is lightly manned during most of the year except for drill weekends. Fort Bliss has a number of military buildings at the base camp that are infrequently used to house and supply troops during training exercises.

Due to the nature of military training, Fort Bliss controls access on the Range at all times. Public access to the Range is restricted. Range operating rules also restrict speed on unpaved roads to 35 MPH and to 20 MPH on trails. The Ranges are not open to recreational off-road motorized use.

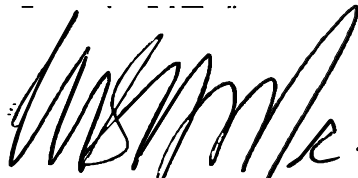
It should be noted that during the portion of the year most subject to wind generated dust events, that due to prevailing wind direction and geography, Fort Bliss is a receptor, rather than a generator, of blowing dust entrained on the West-to-East winds coming through Anthony Gap. It should also be considered that by nature of the Army's military activities and training needs, a large portion of Doña Ana County is not subject to development or industrial activity.

The areas of Fort Bliss within New Mexico, including the Doña Ana Range and the McGregor Range, are net receptors of airborne particulate matter and other airborne pollutants generated in the surrounding areas. By ameliorating the effects on the local air shed from anthropogenic sources of airborne pollutants, Fort Bliss has a significant beneficial impact on air quality in Doña Ana County, as well as in Otero County and El Paso County.

I am aware of the possible ramifications of a designation of non-attainment status for Doña Ana County, and encourage the timely implementation of a Natural Events Action Plan which would prevent EPA from making such a designation.

POC for this office is Mr. Clyde Durham, 578-1838.

Sincerely,

A handwritten signature in black ink, appearing to read "WBHobson, Jr.", with a long, sweeping underline that extends below the printed name.

Wallace B Hobson, Jr.
Col USA
Commanding

P186L Operating Permit

Attachment 2

CAMINO REAL LANDFILL DUST CONTROL PLAN AND CORRESPONDING MAP

PURPOSE - To limit particulate matter emissions into the ambient air from any property, operation or activity that may serve as a fugitive dust source at the Camino Real Landfill.

EFFECT - Shall be to minimize the amount of PM¹⁰ and TSP entrained into the ambient air as a result of the impact of human activities by requiring measures to prevent, reduce, or mitigate particulate matter emissions.

Access Restrictions

1. Vehicle use in open areas and vacant lots.
 - a. No trespassing (English and Spanish) signs must be in place along the fence adjacent to the landfill entrance.
 - b. Access to landfill must be limited to the ticket office for solid waste disposal vehicles. The US Border Patrol enters through the ticket office and through a rear entrance.
 - c. 24 hr security is already maintained and the US Border Patrol is located on site.
 - d. Records shall be maintained for reporting purposes.
2. Camino Real shall maintain physical barriers (5-strand barbed wire fence) around the landfill to restrict access to the facility. The main entrance shall be equipped with a security gate.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

Control of Emissions

1. Unpaved parking lots
 - a. Gravel shall be applied as a base course to the parking lot. The amounts of gravel and the date of application shall be recorded.
 - b. Open areas and parking lots shall be watered to control fugitive dust emissions as described in the Title v application, Appendix 6.7 (Dust Control Plan). The amount of water used and the frequency of water application must be recorded.
 - c. The landfill shall apply dust surfactants semiannually to the unpaved parking as a supplement to the water.

Records consistent with the Title V permit requirements shall be maintained for

reporting purposes.

2. Unpaved Haul/Access Roads (As referenced in the attached Dust Control Management Plan map and the facility layout map in the application)
 - a. Signs shall be posted limiting vehicle speeds on the access road to 15 MPH.
 - b. Water application
 - Primary Disposal Route-- During peak dust generating circumstances the water wagon shall make 18 passes per day applying approximately 57,000 gallons of water per day to the primary disposal route. The watering frequency shall be approximately once every thirty minutes.
 - Access Roads-- During peak dust generating circumstances the water wagon shall make 2 passes per day applying approximately 13,000 gallons of water per day to the access roads. The watering frequency is approximately once every four hours.
 - Construction of new disposal cells occurs three months out of the year. During this time period a water wagon shall apply approximately 77,000 gals per day to the cell areas under construction. During cell construction (three months out of the year) the application of water to control dust shall be continuous.
 - High wind events during cell construction shall prompt increases in the frequency and application rate of water or cessation of evacuation until the wind subsides.
 - c. Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

3. **Disturbed Surface Areas**

a. Construction Area Preparation

For construction area preparation, as described above in the Title V application, Appendix 6.7 Item 4,c,1.0 (Dust Control Plan) water shall be applied in the amounts and at the time periods described therein.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

b. Phasing of Work

Landfill operations shall include the evacuation and hauling of only the amount of soil needed for daily cell construction, cover requirements, trenching, road building, or other excavation activities.

Once soil subgrade is prepared for each cell, a GCL/FML composite liner shall be put in place.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

c. **Emission Controls During Dust Generating Operations**

During cell construction and other dust generating operations, water shall be applied as described in the Title V Application Appendix 6.7, Item 5,D (Dust Control Plan) and this part of the permit. Water shall be applied in the amounts and at the time periods described therein to haul/access roads, parking lots, area being excavated, and under high wind conditions to the active fill face.

Roadoyl (a commercial surfactant) or other equivalent surfactant shall be used semiannually on unpaved parking lots, haul and access roads.

Records shall be maintained for reporting purposes

d. **Wind Barrier**

Camino Real Landfill shall construct wind barriers (3 feet to 5 feet high) with fifty percent or less porosity (lath fences). The fences shall be deployed at strategic down wind locations to trap particulates before they exit the site. This shall be done in conjunction with water application during cell construction and other dust generating operations.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

4. **Temporary Stabilization During Non-Operating Hours (Weekends, after hours and on holidays)**

a. **Vegetative Ground Cover**

- Vegetative Test plots cover approximately 27 acres of the closed area.
- Vegetation is supplemented by six acres of rock armoring for fugitive dust emission control in the closed area.

b. **Commercial Dust Suppressant**

- Roadoyl (a commercial surfactant) or other equivalent surfactant shall be used semiannually on all unpaved parking lots, haul and access roads.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

c. **Vehicular Access**

- The Camino Real Landfill operating hours are 4:30 A.M. to Dusk P.M. Monday through Saturday. Traffic from all solid waste delivery vehicles and daily operations vehicles does not occur after work hours on Sundays or on holidays.
- Border Patrol has access to the property however this access does not significantly affect emissions of particulates.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

5. **Permanent Stabilization**

a. **Phased landfill stabilization**

- When the landfill construction and operation of cells has reached prescribed intermediate grade, the grade slopes shall be covered with 12 inches of soil which has been supplemented by race track waste. The race track waste shall be comprised of straw and decaying horse manure which possesses a larger particle size and higher moisture content than native soil making it more emission resistant than native soil.
- Rock armoring has been applied over 6 acres of the closed area and 27 acres are covered by vegetative test plots to minimize fugitive dust emissions. Additional rock armoring and vegetative plots shall be recorded.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

b. **Ultimate Landfill Stabilization**

- The ultimate site closure final cover system shall be constructed to include the planting of vegetation similar to nearby undisturbed native conditions.
- The Camino Real Landfill shall comply with the conditions set forth in Sections 2.0 (Closure Plan) and Section 3.0 (Post Closure Plan) and attachment 5 of the Closure/Post Closure Plan 1995 Solid Waste permit.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

6. **Open Areas and Vacant Lots**

- a. **Area restoration---**Open areas and parking lots shall be watered to control fugitive dust emissions as described in the Title V Application Appendix 6.7, Item 4.G (Dust Control Plan). Water shall be applied in the amounts and at the time periods described therein to haul/access roads, parking lots, areas being excavated, and under high wind conditions to the active fill face.
- b. **Application of suitable Dust Suppressant---** Roadoyl (a commercial surfactant) or other equivalent surfactant shall be used semiannually on unpaved parking lots, haul and access roads.
- c. **Vegetative Ground Cover---**Vegetative test plots occupy 27 acres of the closed area.
- d. A drip irrigation system shall be used for new vegetative plots in any other areas of the landfill until a preliminary root system has been established.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

7. Bulk Material Handling Operations and Open Storage Areas

a. Water Application

- During cell construction and other dust generating operations, water shall be applied as described in the Title V Application Appendix 6.7, Item 4.H (Dust control plan), water shall be applied in the amounts and at the time periods described therein to haul/access roads, parking lots, area being excavated, and under high wind conditions to the active fill face.
- Roadoyl (a commercial surfactant) or other equivalent surfactant shall be used semiannually on unpaved parking lots, haul and access roads.

Records consistent with the Title V permit requirements shall be maintained for reporting purposes.

b. Wind Barriers

- Camino Real Landfill shall construct wind barriers (3 feet to 5 feet high) with fifty percent or less porosity (lath fences). These fences shall be deployed at strategic down wind locations to trap particulates before they exit the site. Approximately 1.5 miles of 3 foot lath fence is currently deployed at strategic locations at the landfill.
- A vegetative Barrier comprised of 2800 ft. of 6 foot high Oleander bushes are currently positioned atop the screening berm, which is located parallel to the northern and eastern property boundary downwind of the prevailing wind direction.

8. Waste Hauling and Transportation

a. Enclosed Waste Delivery Vehicles

- All waste delivery vehicles entering the landfill shall be enclosed and landfill personnel shall require that all non-enclosed waste delivery vehicles be covered prior to entry.
- Signs shall be posted limiting vehicle speeds on the access road to 15 MPH.